CONTENTS OF VOLUME 76

JULY, 1956. NUMBER 1

The American Roentgen Ray Society (A Historical Sketch—"Lest We Forget"). *Arthur C. Christie, M.D.* ... 1

Cholografin; A New Intravenously Administered Contrast Medium for the Visualization of the Gallbladder and Bile Ducts (Intravenous Cholecystocholangiography) with a Report on 104 Cases. *William H. Shehadi, M.D.* ... 7

Re-evaluation of Fat-free Preparatory Meal in Telepaque Cholecystography. *Walter M. Whitehouse, M.D.* ... 21

Gallstone Obturation of the Duodenal Bulb. *Leo S. Figiel, M.D., and Steven J. Figiel, M.D.* ... 24

Cholangiographic Diagnosis of Pancreatitis. *Maurice D. Sachs, M.D., and Phillip F. Partington, M.D.* ... 32

Angiopac, Ethyl Di-iodostearate As a Hepatosplenographic Agent. *S. M. Berger, M.D.* ... 39

Roentgenographically Demonstrable Splenic Deposits in Sickle Cell Anemia. *George Jacobson, M.D., and Sidney D. Zucherman, M.D.* ... 47

The Incidence of Splenic Calcifications in Positive Reactors to Histoplasmin and Tuberculin. *B. Serviansky, M.D., and J. Schwarz, M.D.* ... 53

Acute Fulminating Histoplasmosis. *George E. Fissel, M.D.* ... 60

The Cardio-thoracic Ratio in Roentgenography of the Normal Pregnant Patient. *Marvin Rollins, M.D., and Frederick J. Bonte, M.D.* ... 64

Quintuple Pregnancy; Case Report. *John W. Lawlah, M.D.* ... 70

The Roentgen Manifestations of Caisson Disease. *Maxwell H. Poppel, M.D., and William T. Robinson, M.D.* ... 74

Occurrence of Metastasis of Bronchogenic Carcinoma to Bone; Report of a Case with Osteoblastic Metastasis. *Harold Feld, M.D., and Renzo G. Olivetti, M.D.* ... 81

Circumscribed Pulmonary Lesions in Periarteritis Nodosa and Wegener's Granulomatosis. *James V. Rogers, Jr., M.D., and Albert E. Roberto, M.D.* ... 88

Roentgen Findings in a Case of Chronic Melioidosis. *Charles P. Oderr, M.D., and James F. Shaw, M.D.* ... 94

Recurrent Pulmonary Hemorrhage with Hemosiderosis: So-called Idiopathic Pulmonary Hemosiderosis. *André J. Bruwer, M.B., Ch.B., Roger L. J. Kennedy, M.D., and Jesse E. Edwards, M.D.* ... 98

Lipoid (Mineral Oil) Pneumonia and Cor Pulmonale Due to Cardiospasm; Report of a Case. *Irsael Steinberg, M.D., and Nathaniel Finby, M.D.* ... 108

Geriatric Roentgenology of the Normal and Its Borderlines. *Ernest Lachman, M.D.* ... 115

The Roentgen Findings in Certain Abdominal Disorders. *Marcy L. Sussman, M. D., and Leo Reich, M.D.* ... 127

Calcification in Secretory Disease of the Breast. *J. Gershon-Cohen, M.D., Helen Ingleby, M.D., and M. B. Hermel, M.D.* ... 132

The Roentgen Diagnosis of Fruit Pits in Gastrointestinal Tract. *Bernard S. Wolf, M.D., and Richard H. Marshak, M.D.* ... 136

Free Intraperitoneal Air. *Harry W. Fischer, M.D.* ... 143

Roentgenologic Findings of Small Intestine in 100 Repatriated Prisoners of War; Deficiency States and Worm Infestations. *Walter Francke, M.D.* ... 149

Polycystic Disease of the Kidney in Infants; Nephrograms Following Intravenous Urography. *C. L. Hinkel, M.D., Med.Sc.D., and L. C. Santini, M.D.* ... 153

Chelation in Contrast Roentgenography with Special Reference to Lead Disodium EDTA. *Robert Shapiro, M.D.* ... 161

Portable Isotopic Radiographic Units. *A. T. Krebs, Ph.D., and J. G. Kereiakes, Ph.D.* ... 168

Editorials

Fifty Years of Progress. *W. Edward Chamberlain, M.D.* ... 177

Fifty-seventh Annual Meeting of the American Roentgen Ray Society ... 179

Lyell Cary Kinney, 1884–1956. *Charles M. Richards, M.D.* ... 180

Jack Friedman, 1911–1955. *Thomas Borden Merner, M.D.* ... 182

Society Proceedings, Correspondence and News Items ... 184

Book Reviews ... 192

Books Received ... 195

Abstracts of Radiological Literature ... 199

August, 1956. Number 2

Neurological Surgery, So to Speak, Out of Roentgenology, *Loyal Davis, M.D.* 217
Roentgenographic Signs of Tumors of the Brain. *Eva L. Gilbertson, M.D., and C. Allen Good, M.D.* .. 226
Myelography of Complete Spinal Obstruction. *Arthur S. Tucker, M.D.* 248
Measurement of the Cervical Spinal Cord in Pantopaque Myelography. *Edward C. Porter, M.D.* 270
The Importance of Myelography in Spinal Pathology; Analytical Study of 150 Cases. *F. J. Borrelli, M.D., and A. A. Maglione, M.D.* 273
The Roentgen Diagnosis of Herniated Disk with Particular Reference to Diskography (Nucleography). *William G. Peacher, M.D., and Richard P. Storrs, M.D.* 290
The Estimation of Skull Capacity from Roentgenologic Measurements. *I. L. MacKinnon, M.B., J. A. Kennedy, M.B., D.M.R., and T. V. Davies, M.Sc.* 303
Studies in Stereoencephalotomy. V. Roentgenologic Localization of Lesions or Implanted Electrodes. *E. A. Spiegel, M.D., and H. T. Wycis, M.D.* 311
The Role of the Emergency Skull Roentgenogram in Head Trauma. *Elmer G. St. John, M.D.* 315
Fibrous Dysplasia of the Skull with Sarcoma; A Case Report. *A. A. Hobbs, Jr., M.D., W. C. Fisher, M.D., and R. E. Beck, M.D.* 320
Granular Cell Tumor of the Neurohypophysis. *Norman Glazer, M.D., Harry Hauser, M.D., and Harry Slade, M.D.* 324
The Tympanic Cavity and Auditory Ossicles; Roentgen Findings in Health and Disease. *Eugene P. Pendergrass, M.D., Philip J. Hodes, M.D., Roderick L. Tondreau, M.D., and Philip A. Marden, M.D.* 327
Rhinolith. *James G. Davis, M.D.* 343
Roentgenographic Findings in Trigeminal Neuralgia. *W. James Gardner, M.D., Edwin M. Todd, M.D., and J. Portugal Pinto, M.D.* 346
The Effect of Single Doses of Roentgen Radiation on Experimentally Induced Gliomas; With a Critical Review of the Effects of Roentgen Radiation on Gliomas in Man. *Martin G. Netsky, M.D., Jerome Shapiro, M.D., Marillyn Hoffman, B.S., B. Corsentino, M.D., J. R. Fried, M.D., and H. M. Zimmerman, M.D.* 351
Radioactive Gold in the Subarachnoid Space of the Dog. *Sidney Rubenfeld, M.D., F.A.C.R., and Bertram E. Zietel, M.D.* 367
Energy Deposition in Tissue by Neutrons of Various Energies and the B^{10} (n, α) Li Reaction. *M. A. Greenfield* 372
Possible Use of the Neutron Capturing Isotope $Lithium^6$ in the Radiation Therapy of Brain Tumors. *Alfred J. Luessenhop, M.D., William H. Sweet, M.D., and Janette Robinson, A.B.* 376
Editorials
Roentgenology in Relation to Neurological Surgery. *Gilbert Horrax, M.D.* 394
The Annual Meeting of the American Radium Society. *Harry Hauser, M.D.* 396
Section on Instruction 398
Book Reviews 413
Books Received 419
Abstracts of Radiological Literature 421

September, 1956. Number 3

The First Sixty Years of Pediatric Roentgenology in the United States —1896 to 1956. *John Caffey, M.D.* 437
Roentgenographic Investigation of the Human Skeleton During Early Fetal Life. *Ronan O'Rahilly, M.D., and David B. Meyer, M.S.* 455
A Significant Variant in the Ossification Centers of the Vertebral Bodies. *Jonathan Cohen, M.D., Guido Currarino, M.D., and Edward B. D. Neuhauser, M.D.* 469
The Width of the Spinal Canal in the Growing Vertebra with Special Reference to the Sacrum; Maximum Interpediculate Distances in Adults and Children. *Gerhart S. Schwarz, M.D.* 476
Observations on the Association Between Nutritive Failure, Skeletal Maturation Rate and Radiopaque Transverse Lines in the Distal End of the Radius in Children. *Samuel Dreizen, D.D.S., Catherine Currie, B.S., Ellie Jo Gilley, B.A., and Tom D. Spies, M.D.* 482
The Ischiopubic Synchondrosis in Healthy Children: Some Normal Roentgenologic Findings. *John Caffey, M.D., and Steven E. Rosss, M.D.* 488
The Skull in Childhood Myxedema: Its Roentgen Appearance. *M. Arias Bellini, M.D., and Ilda Neves, M.D.* 495
Prenatal Obstruction of the Fourth Ventricle. *Donald D. Matson, M.D.* 499

Subdural Collections of Fluid in Infants and Children; I. Visualization of the Capsule with Thorium Dioxide. *R. M. N. Crosby, M.D., and John M. Dennis, M.D.* ... 507
Cytomegalic Inclusion Disease with Calcification Outlining the Cerebral Ventricles. *George L. Sackett, Jr., M.D., and Mary M. Ford, M.D.* ... 512
Congenital Cystic Adenomatoid Malformation of the Lung in Infants. *John M. Craig, M.D., John Kirkpatrick, M.D., and Edward B. D. Neuhauser, M.D.* ... 516
Primary Chickenpox Pneumonia. *Diana Y. M. Tan, M.D., S. A. Kaufman, M.D., and George Levene, M.D.* ... 527
Roentgen Findings in Chickenpox Pneumonia; Review of the Literature and Report of Five Cases. *Martha Ellen Southard, M.D.* ... 533
Cardio-esophageal Relaxation (Chalasia) Studies on the Normal Infant. *Leo Blank, M.D., and Wilmer L. Pew, M.D.* ... 540
Dehydration and Deficiency of Intestinal Gas in Infants with Hypertrophic Pyloric Stenosis. *Samuel B. Feinberg, M.D., Alexander R. Margulis, M.D., and Charles M. Nice, M.D.* ... 551
Meconium Peritonitis; Report of a Case in Which Diagnostic Roentgen Signs Were Found Antepartum. *John H. Harris, M.D., F.A.C.R., William E. DeMuth, Jr., M.D., and John H. Harris, Jr., M.D.* ... 555
Roentgenographic Demonstration of Intestinal Ascariasis in Children without Using Barium. *Ivan Isaacs, M.D.* ... 558
Roentgenologic Investigation of Patients with Heterosexual Development. *Thoedore A. Tristan, M.D., Walter R. Eberlein, M.D., and John W. Hope, M.D.* ... 562
Hereditary Metaphyseal Dysostosis. *Robert Lenk, M.D.* ... 569
Infantile Cortical Hyperostosis; Report of Two Cases with Review of Points of Differential Diagnosis from Hypervitaminosis A. *David H. Allen, M.D., Frank S. Browne, M.D., and A. W. Pierce, M.D.* 576
Ocular Calcification and Retrolental Fibroplasia. *Hooshang Tayebi, M.D., M.Sc.* ... 583
Lymphosarcoma in Infancy and Childhood; Including a Case of Twenty-two Years' Survival. *Herman Charache, M.D.* ... 594
Congenital Absence of the Pectoral Muscle. *Isadore Katz, M.D., Robert M. Fischer, M.D., and Stephen D. Berardinelli, Lt. Col., M.C., U.S.A.* ... 599
Officers ... 605
Editorial
A Word of Appreciation, *Edgar E. Martmer, M.D.* ... 606
Society Proceedings, Correspondence and News Items ... 607
Book Reviews ... 612
Books Received ... 617
Abstracts of Radiological Literature ... 619

October, 1956. Number 4

Sixty Years of Cardiovascular Roentgenology. *Harold Fulton, M.D.* ... 657
Practical Value of the Posteroanterior Roentgenogram and Roentgenoscopy in Certain Types of Heart Disease. *André J. Bruwer, M.D.* ... 664
Cardiac Roentgen-ray Patterns in Rheumatic Heart Disease; Correlation of Roentgen and Operative Findings in 150 Consecutive Cases: I. Preliminary Report. *A. Edward Colcher, M.D., Irving B. Wexlar, M.D., and Louis Magilner, M.D.* ... 693
The Influence of Posture on Size and Configuration of the Heart as Seen Teleroentgenographically. *J. Edwin Habbe, M.D.* ... 706
The Expanding Scope of Cardiovascular Radiology. *Melvin M. Figley, M.D.* ... 721
Accomplishments and Possibilities in Cardiovascular Surgery. *Henry T. Bahnson, M.D.* ... 730
Pathologic Aspects of Mitral Stenosis. *Jesse E. Edwards, M.D.* ... 740
Congenital Mitral Stenosis; Roentgen Study of Its Manifestations. *Theodore F. Hilbish, M.D., and Robert N. Cooley, M.D.* ... 743
Bilateral Ductus Arteriosus with Right Aortic Arch and Right-Sided Descending Aorta; Report of Case. *James D. Barger, M.D., Edward H. Bregman, M.D., and Jesse E. Edwards, M.D.* ... 758
Left Aortic Arch and Right Descending Aorta; Case Report. *Ward D. Heinrich, M.D., and Ruheri Perez Tamayo, M.D.* ... 762
Aneurysms of the Sinus of Valsalva. *Elmer J. Harris, M.D.* ... 767
The Value of Laminagraphy in Diagnosis and Evaluation of Coarctation of the Aorta. *I. R. Berger, M.D.* ... 773
Coarctation of the Abdominal Aorta; Report of a Case Illustrating the Value of Aortography as a Diagnostic Aid. *James F. Martin, M.D., and Ernest H. Yount, M.D.* ... 782
Technique of Serial Long Film Angiography in Arteriosclerosis Obliterans. *Stanley M. Rogoff, M.D.* 787

A Device for Rapid Serial Angiocardiography in the Erect Position. *John de L. S. Morris, Captain (MC), and Victor T. Riblett* ... 801
A Technique in Percutaneous Cerebral Angiography. *Paul M. Lin, M.D.* ... 804
Abdominal Venography; Technique of Roentgen Visualization of the Inferior Vena Cava. *Joseph J. Kaufman, M.D., and Donald E. Burke, M.D.* ... 807
A Demonstration by Retrograde Aortography of Multiple Pregnancies in the Dog. *Joel J. Schwartzman, M.D., and Elliott S. Hurwitt, M.D., F.A.C.S.* ... 813
Editorial
New Horizons in Cardiovascular Roentgenology, *Charles T. Dotter, M.D.* ... 817
Society Proceedings, Correspondence and News Items ... 819
Book Reviews ... 820
Books Received ... 825
Abstracts of Radiological Literature ... 827

November, 1956. Number 5

Reflections on Malignant Lymphoma. Janeway Lecture, 1956. *Lloyd F. Craver, M.D.* ... 849
A History of Roentgen Therapy. *Kenneth L. Krabbenhoft, M.D.* ... 859
A Clinical Program to Evaluate the Practical Significance of Higher Energy Levels Than the 1–3 Mev. *Gilbert H. Fletcher, M.D.* ... 866
Some Observations on the Clinical Effects of Cobalt-60 Telecurie Therapy. *C. C. Burkell, M.D., D.M.R.T., and T. A. Watson, M.B., Ch.B., D.M.R.* ... 895
Clinical Aspects of Betatron Irradiation. *Lewis L. Haas, M.D., and Roger A. Harvey, M.D.* ... 905
The Primary Treatment of Adenocarcinoma of the Rectum by High Voltage Roentgen Rays (1,000 Kv.). *I. G. Williams, M.B., F.R.C.S., F.F.R., and H. Horwitz, M.B., B.S.* ... 919
Notes on the Isodose Curves from a 2 Mev. Van de Graaff Machine. *Peter Wootton, B.Sc.* ... 929
Field Localization for Betatron Therapy. *Jasper E. Richardson, Ph.D., Earl Van Roosenbeek, and Jack M. Morgan, B.S.* ... 934
An Automatic Field Mapping Device, *R. J. Schulz, B.S.* ... 939
Carcinoma of Larynx; Results of Roentgen Therapy during a Period of Fifteen Years (1937–1952). *Edward L. Jenkinson, M.D., Lillian Kao, M.D., Paul H. Holinger, M.D., K. C. Johnston, M.D., and R. W. Donnelly, M.D.* ... 942
Squamous Cell Carcinoma of the Thoracic Esophagus; An Evaluation of Treatment Methods. *Harry W. Burnett, Jr., M.D., and S. W. Moore, M.D.* ... 949
Some Basic Concepts Regarding Tumors of Lymphoid Tissue. *John R. Carter, M.D.* ... 956
Treatment of Malignant Lymphoma and Blood Dyscrasias by Conventional Roentgen Therapy. *H. B. Elkins, M.D.* ... 960
Review of Seventeen Years' Experience with Transvaginal Roentgen Therapy in Cervical Cancer. *Ralph M. Caulk, M.D.* ... 965
Solitary Myeloma of Bone; A Case Report. *P. E. Russo, M.D., and B. H. Brown, M.D.* ... 972
Roentgen Therapy of Plantar Warts. *Robert J. Reeves, M.D., and Murray T. Jackson, M.D.* ... 977
A Scintillation Crystal Roentgen-Ray Dosimeter. *J. W. Robson, Ph.D., and E. C. Gregg, Ph.D.* ... 979
Observations on Growth Rates of Human Tumors. *Vincent P. Collins, M.D., R. Kenneth Loeffler, M.D., and Harold Tivey, M.D.* ... 988
Officers ... 1001
Editorial
Roentgen Therapy. *T. Leucutia, M.D.* ... 1002
Society Proceedings ... 1006
Book Reviews ... 1010
Books Received ... 1015
Abstracts of Radiological Literature ... 1016

December, 1956. Number 6

Benefits to Mankind through Integration of Physiology and Radiology. *W. Edward Chamberlain, M.D.* ... 1037
Osteoid Osteoma. *Robert A. Flaherty, M.D., David G. Pugh, M.D., and Malcolm B. Dockerty, M.D.* ... 1041
Osseous Coccidioidomycosis: A Chronic Form of Dissemination. *J. W. Birsner, M.D., and Scott Smart, M.D.* ... 1052
The Migration of a Fracture-Transfixing Pin from the Humerus into the Mediastinum. *Michael Burman, M.D., Sol Grossman, M.D., and Stefan Rosenak, M.D.* ... 1061

Unusual Sequela Following Pinning of Medial Clavicular Fracture. *Victor Kremens, M.D., M.Sc. (Med.), and Frank Glauser, M.D., M.Sc. (Med.), F.A.C.S., F.I.C.S.* ... 1066
Large Foreign Body Cyst with Migration of Smith-Petersen Nail. *Raymond J. Terrafranca, M.D., Allan Zellis, M.D., and Roman Babyn, M.D.* ... 1070
Primary Epidermoids of the Skull, Including a Case with Malignant Change. *P. V. Haig, M.D.* ... 1076
Examination of the Atlanto-Axial Joint Following Injury; With Particular Emphasis on Rotational Subluxation. *George Jacobson, M.D., and Denis C. Adler, M.D.* ... 1081
Secondary Ossification Centers and the Intra-Articular Ossicle. *Lee A. Hadley* ... 1095
Fracture Dislocation of the Ankle with Fixed Displacement of the Fibula behind the Tibia. *John J. Fahey, M.D., Leo T. Schlenker, M.D., and Richard C. Stauffer, M.D.* ... 1102
The Os Sustentaculi. *Herman C. March, M.D., and Russell I. London, M.D.* ... 1114
Benign Osteopetrosis; Report of 9 Cases. *Arnold D. Piatt, M.D., Gerald A. Erhard, M.D., and Jacob S. Araj, M.D.* ... 1119
Benign Chondroblastoma of Bone; Its Roentgen Diagnosis. *Robert S. Sherman, M.D., and Ali Reha Uzel, M.D.* ... 1132
Osteitis Condensans Ilii. *Josephine Wells, M.D.* ... 1141
Fracture of the Hyoid Bone; Presentation of One Case. *Maxwell H. Poppell, M.D., and Robert O. Christman, M.D.* ... 1144
Roentgenologically Demonstrated Myelomatous Areas of the Skeleton Proving to Be Due to Metastases from Epithelioma. *Hans H. Bassöe* ... 1146
Osteomyelitis Variolosa. *Robert W. Bertcher, M.D.* ... 1149
Clinical Significance of the Supracondyloid Process of the Humerus; Case Report. *Nathan Kriss, M.D.* 1154
Asymmetry of Osteophytosis in the Thoracic Spine. *Gordon J. Culver, M.D., and Herbert S. Pirson, M.D.* ... 1157
Ischial Epiphysiolysis. *Chester A. Stayton, Jr., M.D.* ... 1161
A Method of Measuring the Femoral Neck in Surgical Treatment of Fractures of the Hip. *Edmund Van Brunt, B.A.* ... 1163
Officers ... 1166
Editorial
The Fifty-seventh Annual Meeting of the American Roentgen Ray Society ... 1167
The Scientific Exhibit ... 1172
The Commercial Exhibit ... 1179
Abstracts of Radiological Literature ... 1180
Subject Index to Volume 76 ... 1197
Author Index to Volume 76 ... 1215